

April 14, 2015
Genetic Construction Report: J-15- [REDACTED] - [REDACTED], -17, [REDACTED]

Analyst: Mark Segal, Ph.D.

[REDACTED]

Submitter:

[REDACTED]

Introduction:

[REDACTED]

These [REDACTED] strains have the following phenotypes:

[REDACTED]

Uses:

[REDACTED]

Parent or Recipient Microorganism: The starting strain for all microorganisms covered by this consolidated MCAN is the wild type [REDACTED]

[REDACTED]

Genetic Modifications: Intergeneric genes included:

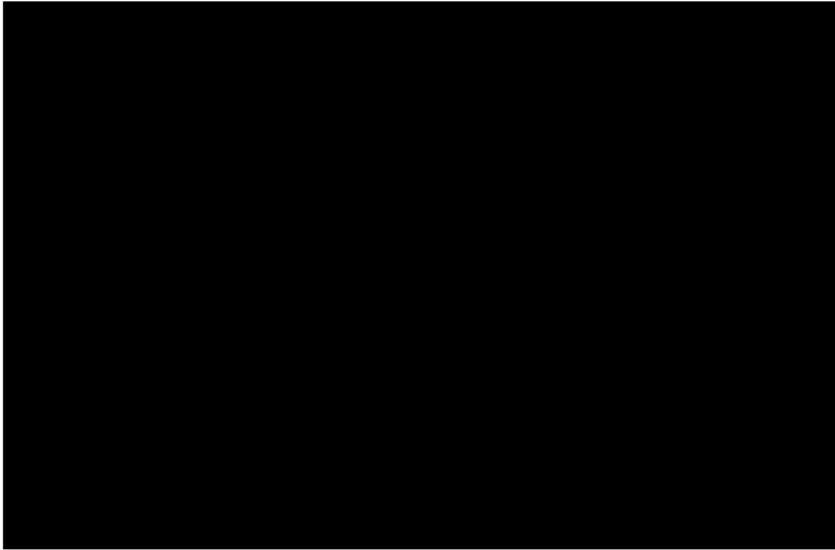
[illegible]

[REDACTED] were used during intermediate construction steps but not left in MCAN strains.

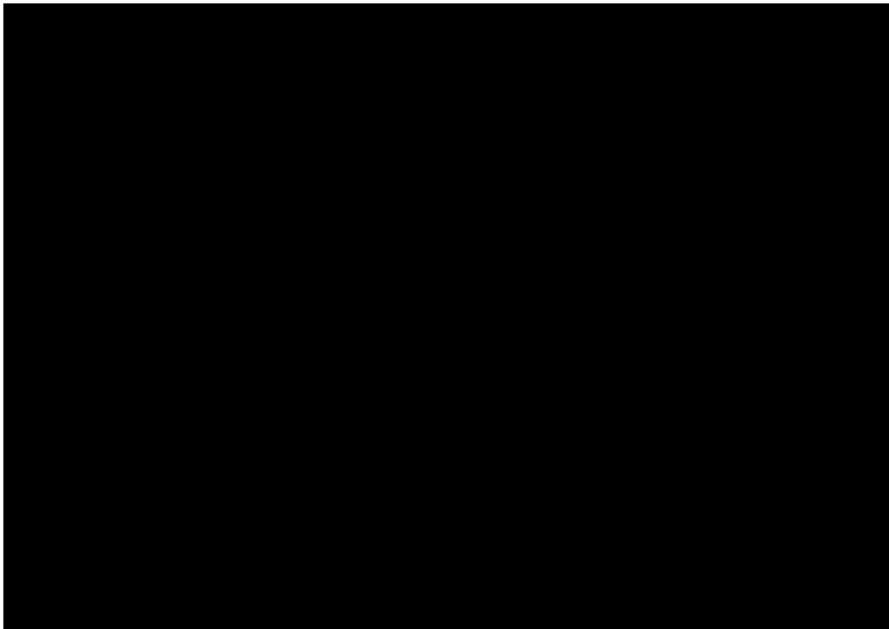
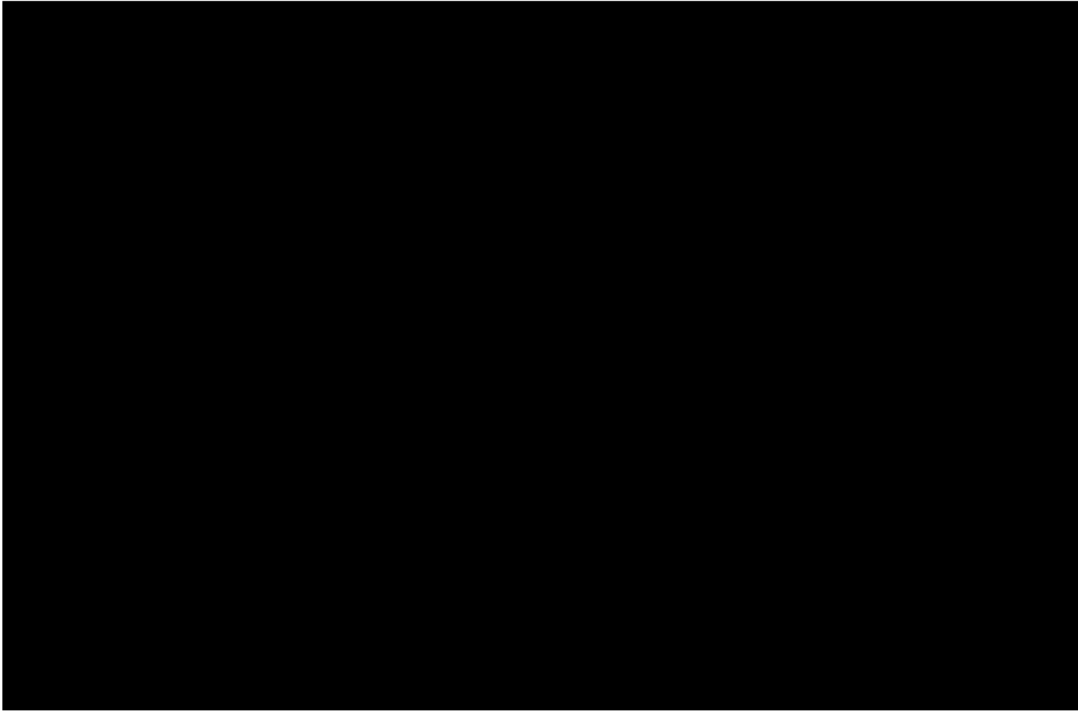
Some of these genes are derived from sequences from various [REDACTED] species, and, while all have been chemically synthesized, they may qualify as intragenetic. [REDACTED]

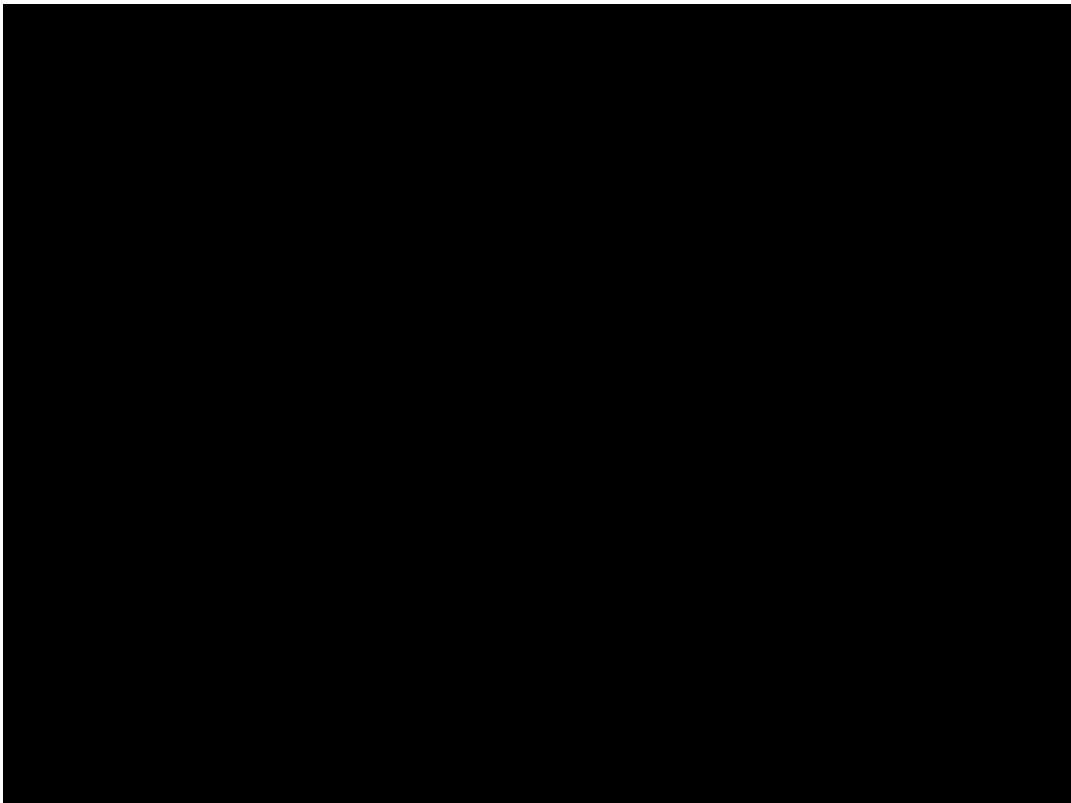
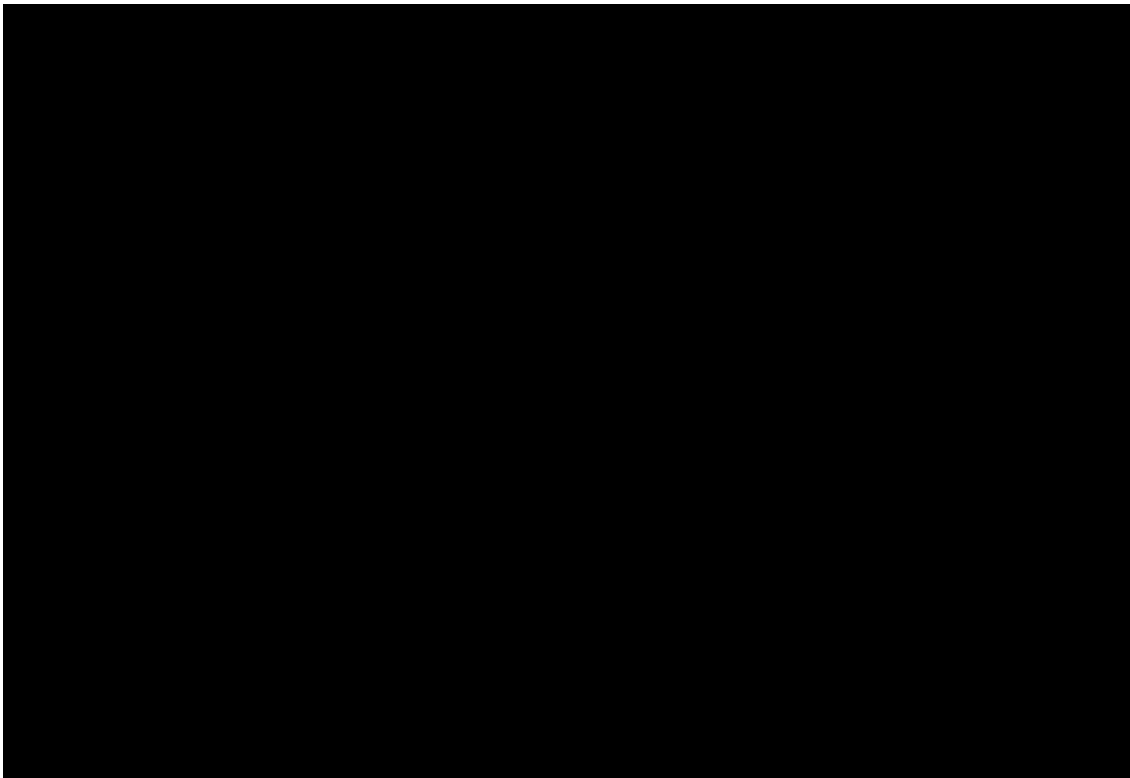
Construction Process.

Plasmids:



Plasmid maps [REDACTED]





[REDACTED]

[REDACTED]

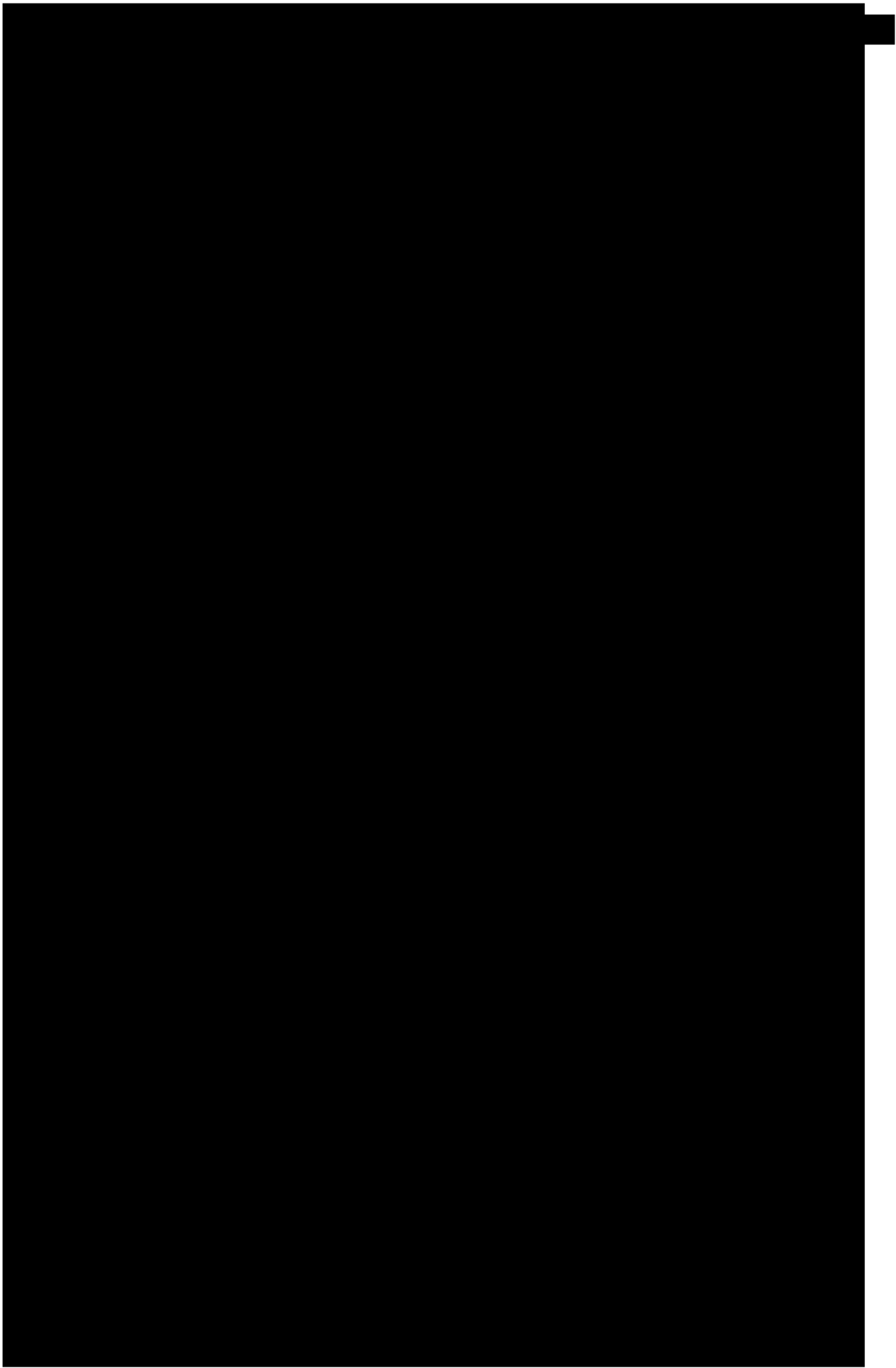
[REDACTED]

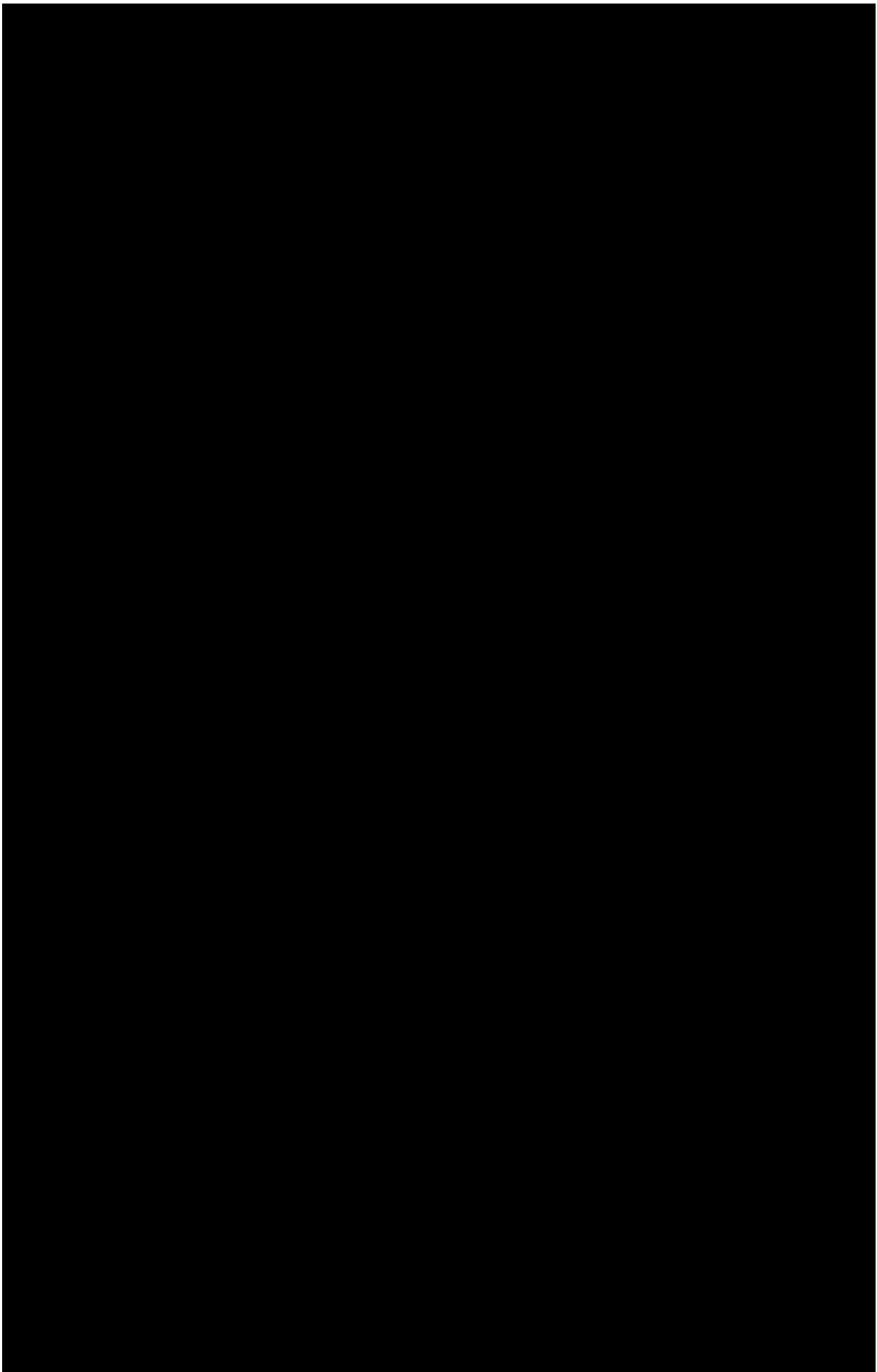
[REDACTED]

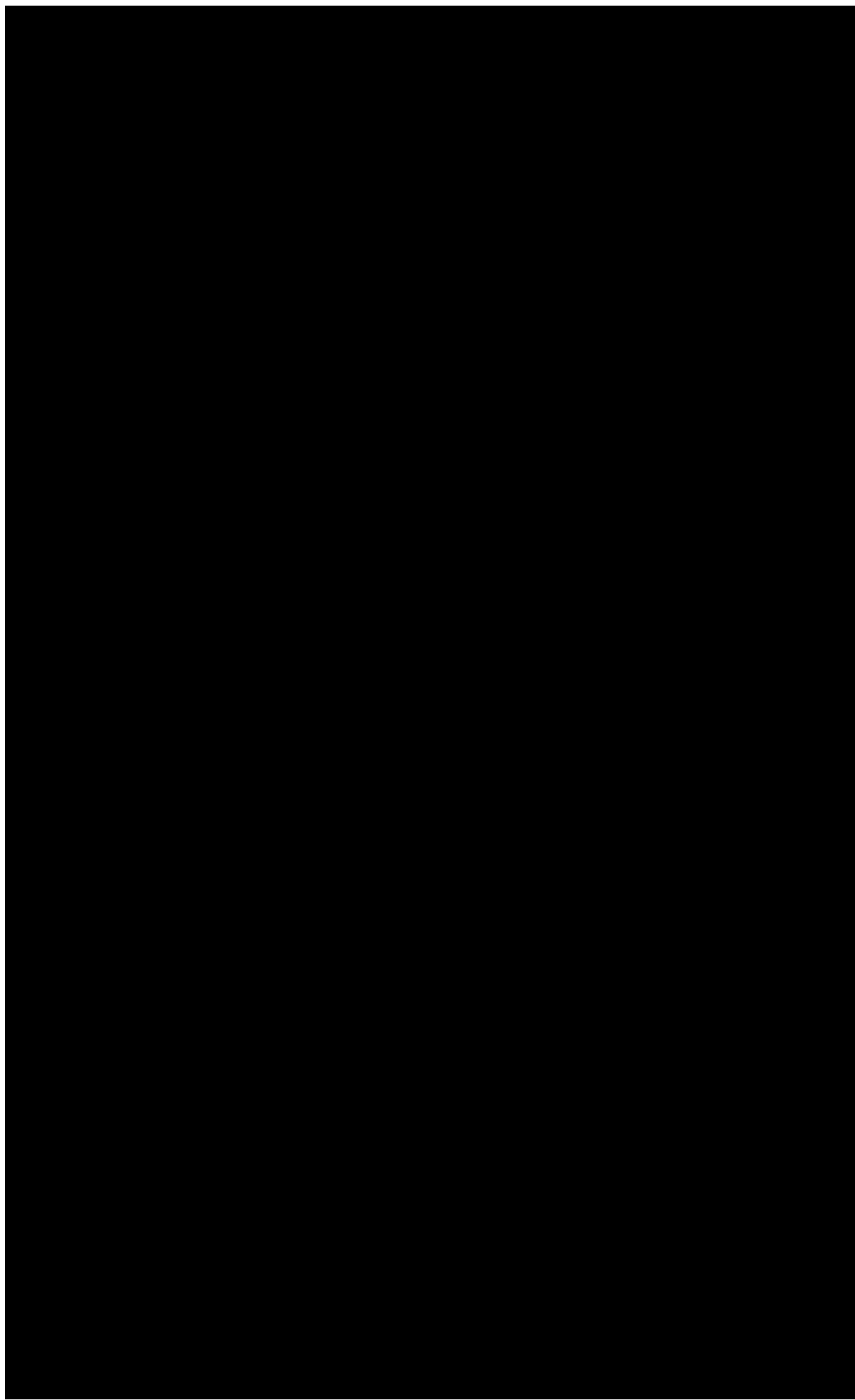
[REDACTED]

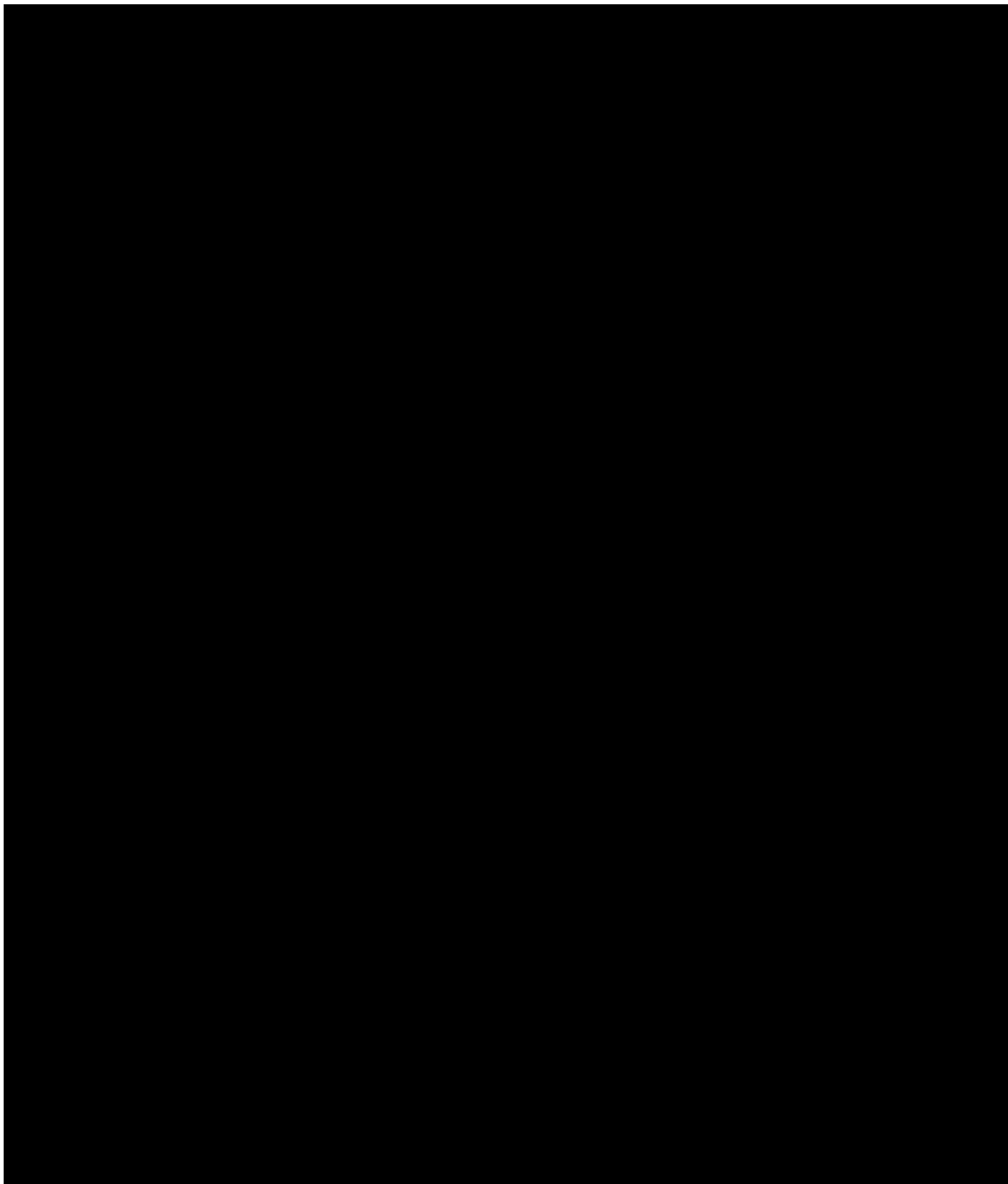
[REDACTED]

[REDACTED]

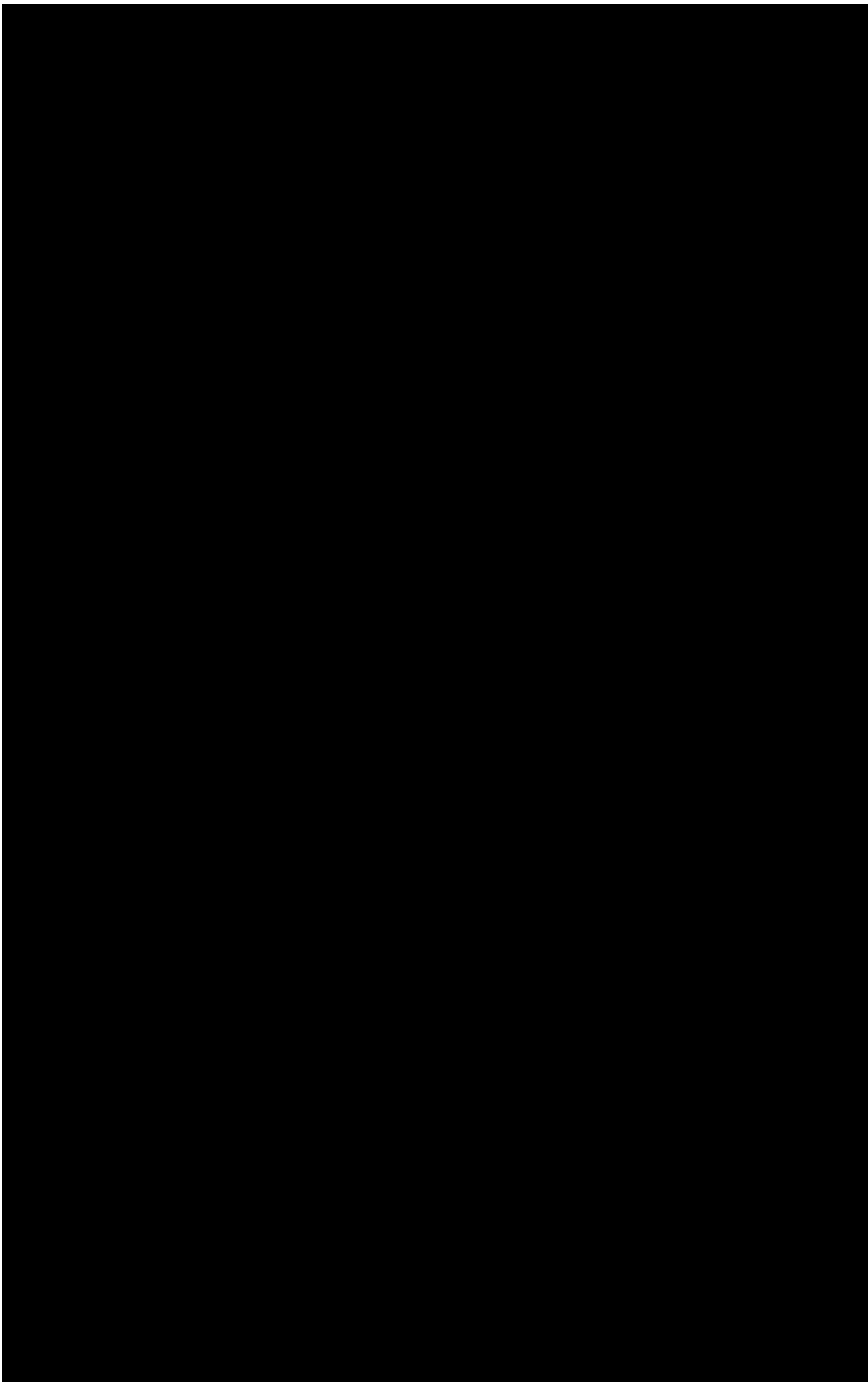








[The following text is a dense, handwritten manuscript, likely a letter or a page from a book. It is written in a cursive script and is mostly illegible due to the quality of the scan. The text appears to be a continuous paragraph or a series of connected sentences. The handwriting is somewhat slanted and the ink is dark. There are some words that are more legible than others, but the overall content cannot be accurately transcribed.]



[REDACTED]

[REDACTED]

[REDACTED]

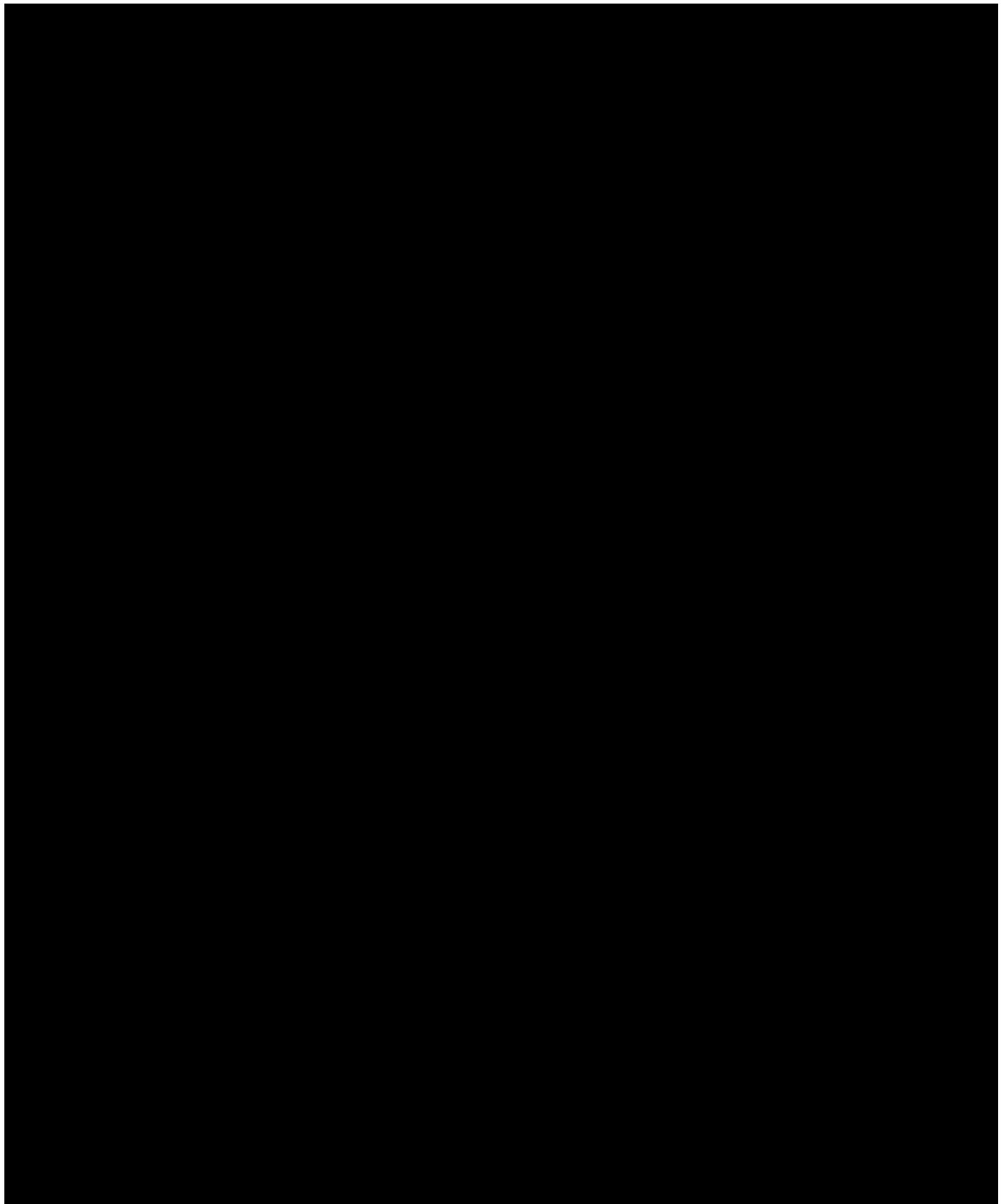
[REDACTED]

[REDACTED]

Multiple Copies of introduced genes

[REDACTED]

[REDACTED]



[illegible]

The strains are all intergeneric. Some have additional genes. All antibiotic resistance genes are removed once the insertions take place. The description of each construction process is complete.